

NH DES WASTEWATER OPERATOR TRAINING
FALL 2006 COURSE SCHEDULE

SEPT 7 & 14

2 Days

9:00am – 3:00pm

\$225

FTC

1.0 CEUs

Separate

Registration

form enclosed

Pro-Active Maintenance Programs at Wastewater Treatment Facilities

Taught by: Jim Hallene, Henkel Loctite Corp.

This comprehensive course will cover a multitude of issues to help wwtf maintenance staff be more proficient in their efforts and lower O&M costs. Topics featured: fasteners, including proper torque and locking devices; retaining cylindrical assemblies; pipe thread sealing; gaskets and flanges; centrifugal pump assembly and preventing common failures; maintenance epoxies & adhesives; and wear prevention & repair. Each participant will receive a Toolbox with Loctite maintenance and repair products and each will become familiar with their use and application. It is expected that students attend BOTH days of this class to earn credit.

Class size is limited to 25 people. To Register use Motion Industries form only and mail payment directly to Motion Industries

SEPT 11, 12 & 13

Mon & Tues

8:00am – 4:00pm

Wed

8:00 am to noon

\$50

FTC

1.8 CEUs

Confined Space Entry

Taught by: State of NH Bureau of Education and Training

Confined spaces can be extremely hazardous and may contain a variety of problems: atmospheric hazards, accumulation of toxic materials, flammable or explosive atmospheres and physical hazards. This is a hands-on workshop designed for the beginner, those who write the confined space programs, and those seeking an in-depth refresher.

Enrollment is limited to 10 people.

SEPT 27

Wednesday

9:00am - 3:00pm

\$40

FTC

0.5 CEUs

Quality Assurance and Quality Control for your Laboratory Equipment

Taught by: Richard Schieferstein, President, QC Services, Inc.

A class well suited for treatment plant personnel responsible for lab equipment O&M. Attendees will learn about ISO Standards, World Quality, NELAC and many quality factors that affect the lab environment. Standards used for calibration and proper methods of calibration will be covered for over 15 different lab instruments and meters.

OCT 3

Tuesday

9:00am – 3:00pm

NO Charge

DES Auditorium

0.5 CEUs

Fats , Oil and Grease Seminar

Taught by: Michael Gauthier, Highland Tank Co., NH DES Staff and Guest speakers

The seminar objective is to provide the WWTF operator a good background in FOG issues. Topics include why we need to manage FOG, technology used to prevent grease from entering the WWTF system, industrial pre-treatment regulations and sewer use ordinances, sampling and measurement of FOG, end product disposal options, and the State's FOG management efforts. **Pre-registration Required even though there is No Charge.**

OCT 4 & 10

2 Days

9:00am – 3:00pm

\$45

FTC

1.0 CEUs

Remedial Mathematics Review

Taught by: NH DES Staff

Math skills and problem solving are indispensable tools for all levels of wastewater professionals who use these skills in their jobs daily. This two day class will focus on teaching an understanding of **basic** mathematical concepts and calculations. Fractions, decimals, percents, unit cancellation, basic algebra and wastewater formulas are some of the topics that will be taught with an emphasis on wastewater math. Time will be allotted for individual instruction on all subject matter presented. A pencil and a willingness to learn is all that is required. Students are expected to attend BOTH class days to earn credit.

OCT 6
Friday
0.3 CEUs

NHWPCA FALL MEETING The Fall Meeting will focus on the recent issues of phosphorous removal- tours of the Somersworth WWTF are planned. Tours will be offered from 9 to 11:30 am. Presentation by Underwood Engineers at Noon with lunch to follow at Great Bay Gallery & Function Facility, 25 Willand Dr., Somersworth, NH. Visit the NHWPCA web site- www.nhwPCA.org for details.

Register directly with the NHWPCA – separate announcement forthcoming

OCT 11
Wednesday
9:00am – 3:00pm
\$40
FTC
0.5 CEUs

Looking Out for #1- Wastewater Operator Safety Issues

Taught by: Kristin Noel, Microbiologist, Concord WWTF; Brian McGrath, Woodard & Curran.; John Bocchino, Weston & Sampson.

Topics include the issues selected by operators in the NHWPCA's recent Safety Needs Survey. The Wastewater Safety and Hygiene component will first examine the health risks associated with exposure to wastewater at the plant and in the lab and then demonstrate effective strategies using proper equipment and handling procedures to manage/reduce such risks. A segment on blood borne pathogens will focus on explaining symptoms of diseases, modes of transmission, preparing an exposure control plan, safe work practices, and appropriate emergency response protocol. A segment on personal protective equipment will cover many aspects of the activities performed by operators daily. Another segment will focus on the Resource Conservation Recovery Act- all aspects of the law governing the generation and management of solid and hazardous waste, DOT certified packaging, manifest completion and records retention.

OCT 17
Tuesday
8:00am – 4:30pm
\$100
FTC
0.7 CEUs
**Use Separate
form to Register
With GSRWA**

Process Control Instrument Verification of HACH Chlorine and Turbidity Process Analyzers-

Taught by: Dave Christian, HACH Co., Loveland CO

Granite State Rural Water Association is sponsoring the HACH Company to provide participants with an understanding of chlorine (CI-17) and turbidity process analyzer (1720D) O&M, calibration and verification techniques during Day 1 of this 2 day workshop.

GSRWA Members will receive 20% discount on registration fee (\$80)

OCT 18
Wednesday
8:00am – 4:30pm
\$100
FTC
0.7 CEUs
**Use Separate
form to Register
With GSRWA**

Water and Wastewater Analysis

Taught by : Dave Christian, HACH, Co., Loveland, CO

Granite State Rural Water Association is sponsoring the HACH Company to present an introduction to the analytical techniques and systems available for water quality measurements in drinking and wastewater. Theory and practical application on analytical techniques to include colorimetry, electrochemistry, and turbidity. Students will gain hands on experience with each testing parameter.

GSRWA Members will receive 20% discount on registration fee (\$80)

OCT 19
Thursday
9:00am - Noon
\$25
FTC
0.3 CEU

Laboratory Practices Review for the NEWEA Voluntary Lab Analyst Exam

Taught by: Andrew Fish, NEWEA Lab Committee

The morning session will consist of a review of pertinent laboratory topics covered in the recently developed voluntary “wastewater laboratory analyst” certification exam. Register through DES for the review class.

OCT 19
Thursday
1:00pm - 3:00pm
\$25
Payable to
NEWEA
FTC

Separate
Registration
Required for
Exam

NEWEA Voluntary Wastewater Laboratory Analyst Certification Exam

These exams (there are two grades) were developed by the Laboratory Practices Committee of the New England Water Environment Association (NEWEA) as a voluntary accreditation for wastewater laboratory professionals. Eligibility requirements:

Grade I – At least one year of practical experience in conducting or supervising Wastewater analyses.

Grade II – At least three years of practical experience in conducting or supervising Wastewater analyses.

An Associate's degree in physical or biological science may be substituted for one year of experience. A bachelor's degree in physical or biological science may be substituted for two year's experience. A study guide is available from NEWEA for \$10.

For the Lab Exam use the enclosed NEWEA registration form and mail directly to NEWEA

OCT 24
Tuesday
9:00am – 3:00pm
\$40
FTC
0.5 CEUs

An Operator's Guide to Biological Nutrient Removal Process Control

Taught by: Mike Cherniak, Senior VP Woodard & Curran Engineers

The discussion will cover nitrification, denitrification, and biological phosphorous removal with special focus on process control. Instruction to include what parameter targets to set, which analyses to perform, how to monitor and interpret data, the correct lab equipment to have on hand, and methods to troubleshoot problems that occur. Mr. Cherniak is a nationally recognized environmental trainer and relates his material directly to the operators and staff who perform the work.

OCT 25
Wednesday
8:30am – 3:30pm
\$40
FTC
0.6 CEUs

Aerated Lagoon Operation and Maintenance

Taught by: Paul Olander, VT Department of Environmental Conservation

This course will cover the basics of aerated lagoon operation including aeration, mixing, sludge management and algae control. Discussion to focus on modern aeration devices, hydraulic baffles, anaerobic reactor cells and the use of barley straw for algae control. Come and learn about lagoons from one of the leading lagoon experts in New England. The knowledge will never hurt you!

OCT 31- NOV 3
Tues – Friday
8:30am - 3:30pm
\$180
FTC
2.2 CEU
Separate
Registration Req'd

NEIWPCC Basic Wastewater Operator Training

Taught by: George Neill, NHDES, Charles Conway, NEIWPCC

This is a four-day course designed for introductory training in the wastewater operations field. People with little or no wastewater operations experience are encouraged to attend. This course helps prepare entry-level individuals for the Grade 1 Certification Exam.

Use the enclosed NEIWPCC registration form and mail directly to NEIWPCC

NOV 7
Tuesday
9:00am - 3:00pm
\$40
FTC
0.5 CEUs

KNOW BEFORE YOU GO- The NPDES Permit Renewal Process- Information you need to know when planning for WWTF improvements

Taught by: John-Paul King, US EPA; George Berlandi and Gregg Comstock, NH DES; Donna Hanscom, City of Keene; Jim Fitch, Woodard & Curran; Edward Rushbrook, Jr. Underwood Engineers

Our target audience includes WWTF operators and owners, consulting engineers, sewer commissioners, Boards of Selectmen, and other municipal leaders responsible for their WWTFs. At some point in time, most WWTFs will require upgrades, improvements or expansion to replace failing equipment, address continuous development and population growth, or meet more stringent effluent quality standards. Before any WWTF improvements are initiated, one must first consider the assimilative capacity of the receiving water, and the potential discharge permit requirements. This class will provide insight into these issues. Topics to include the roles for both DES and EPA in the permit renewal process; discussion of potential permit issues, and how TMDLs can be used to develop future permit limits. Specific case studies will be used.

NOV 8

Wednesday

9:00am – 3:00pm

\$40

FTC

0.5 CEUs

The Qualities of Good Leaders and Good Quality Leadership

Taught by: Lorraine Sander, EMI

When faced with the option to “lead, follow, or get out of the way”, let’s face it, we want to lead. But are we prepared to lead? This class will explore the personal qualities that leaders need to be effective, and what it means to be the leader, not just the boss. The experiences we face today are already shaping our ability to lead tomorrow no matter what level we may be in our organization. Explore formal and informal leadership, vision, integrity and other elements of leadership. Discover your own personal leadership style. The instructor brings a wealth of teaching and practical experience in the wastewater field.

NOV 15

Wednesday

9:00am – 3:00pm

\$40

FTC

0.5 CEUs

Applied Wastewater Math Review

Taught by NH DES Staff

This class offers a good review for those registered for the WW Certification exams. We will review basic math calculations including perimeters, surface areas, volumes and flow rates. Basic laboratory calculations such as BOD, TSS and VSS will be covered as well as percentage calculations. These basic math skills will then be applied to calculations of detention times, surface loading rates, sludge volumes, chlorine dosages, and percentage of BOD removal, F/M ratios, MCRT, pumping rates, required horsepower ratings and power consumption. The NHDES sanctioned wastewater formula sheet will be distributed at the beginning of the class. Bring calculator & pencils.

NOV 29

Wednesday

9:00am – 3:00pm

\$40

FTC

0.5 CEUs

Grooved Piping Systems/ Air and Vacuum Control in Piping

Taught by: John Grout, Victaulic, & Ron Variengo, GL Lyons & Assoc.

Piping and coupling system components are among the most important systems in the WWTFs. The features and benefits of the grooved piping method for a variety of pipe materials within typical WWTF applications will be covered. Grooving and assembly demonstrations will be included for permanent, by-pass and temporary piping. To include Depend-O-Lok coupling systems for large diameter pipes- design guidelines for flexible and fixed systems and expansion joint options will be discussed. The importance of Air and Vacuum pressure release in forcemain applications to be addressed and how captured air can affect plant pipe performance.

DEC 6

Wednesday

9:30 am

\$50

FTC

CERTIFICATION EXAMS—ALL GRADES

Separate Pre-Registration and Pre-Approval Required

Applications are available from the NH DES Wastewater Operation Section by calling 603. 271.2586, or visit the NH DES website at <http://www.des.state.nh.us/ww/opcert>. The deadline to return applications to DES is **October 6, 2006**. The NH DES Certification Committee will notify applicants of their eligibility within 30 days of the exam date.

DEC 7

Thursday

0.3 CEUs

NHWPCA Winter Meeting

Tentative program includes a tour of the City of Manchester’s Drinking Water Facility, followed by lunch at the Wayfarer Inn, Bedford, NH featuring an Italian Buffet. Details will be available soon go to the NHWPCA web site- www.nhwPCA.org. **Register directly with the NHWPCA – separate announcement forthcoming.**